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| 10/619,093      | 07/14/2003  | Thomas A. King       | 9861-000003/CPA     | 4706             |

7590 10/05/2005  
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EXAMINER

BOCHNA, DAVID

ART UNIT PAPER NUMBER

3679

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/619,093

Applicant(s)

KING, THOMAS A.

Examiner

David E. Bochna

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-92 is/are pending in the application.
- 4a) Of the above claim(s) 24-27, 36-39, 51-59, 63-68 and 80-92 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23, 28-35, 40-50, 60-62 and 69-79 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 24-27, 36-39, 51-59, 63-68, 80-92 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species and method, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/14/05.

### ***Specification***

2. The disclosure is objected to because of the following informalities: The patent number of the related application should be included in the first paragraph of the specification.

Appropriate correction is required.

### ***Claim Objections***

3. Claims 69 and 79 are objected to because of the following informalities:

Claim 69, lines 6, 7 – the phrases “the first arm” and “the second arm” lack antecedent basis.

Claim 79, it is unclear how the tip can be less rigid than the irrigation line if the tip is to puncture and push through the irrigation line. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3679

5. Claims 1-2, 4-7, 10-12, 15, 19-21, 28-30, 60-62, 69 and 72-79 are rejected under 35 U.S.C. 102(b) as being anticipated by King 6,216,723.

In regard to claims 1, 19-20, 28, 30, King discloses a saddle tee (fig. 4) for use in making a fluid connection with an irrigation line in an irrigation system, the saddle tee comprising;

a base 12 having first and second ends, and a passageway there between, and

a clamp on the second end for engaging the irrigation line generally in alignment with the passageway through the base, the clamp compressing the irrigation line to elongate the cross-sectional profile in a direction aligned with the passageway in the base.

In regard to claim 2, wherein the clamp comprises first and second arms, a first jaw 28 hingedly connected to the first arm; a second jaw 28 hingedly connected to the second arm, and wherein the first jaw overlaps and engages the second jaw to close the clamp.

In regard to claim 4, wherein the closed clamp defines a dimension L2 aligned with the passageway, and a dimension L1, perpendicular to L2, and wherein L2 is greater than L1.

In regard to claim 5, wherein the clamp comprises first and second arms, a first jaw 28 hingedly connected to the first arm; a second jaw hingedly connected to the second arm, the first and second jaws adapted to be connected to close the clamp, the maximum transverse dimension between the jaws being less than the diameter of the irrigation line.

In regard to claim 6, wherein the dimension of the clamp parallel to the passageway is greater than the diameter of the irrigation line.

In regard to claim 7, wherein the dimension of the clamp parallel to the passageway is greater than maximum transverse dimension between the jaws.

Art Unit: 3679

In regard to claim 10, wherein the first jaw 28 has first and second ends, and a generally arcuate configuration, with a concave inner surface for engaging a portion of an irrigation line, and the second jaw has first and second ends, and a generally arcuate configuration, with a concave inner surface for engaging a portion of an irrigation line.

In regard to claim 11, wherein the thickness of the arms generally tapers from the proximal end adjacent the base to their distal end.

In regard to claim 12, wherein the jaws are hingedly mounted to their respective arms intermediate their ends (see fig. 4).

In regard to claim 21, the tap has a flange 82 that engages the wall of the irrigation line surrounding the puncture made by the tip 72.

In regard to claim 29, the passage extends generally horizontally.

In regard to claim 60, King '723 discloses a tap for insertion through a passage in a saddle tee for puncturing an irrigation line on which the saddle tee is secured, the tap having a stem having a passage therethrough,

the stem 52 terminating in a blunt point having a radius of curvature greater than about 0.05 inches, whereby the blunt point forms a coupon from the irrigation line wall.

In regard to claim 61, King '723 discloses a tap for insertion through a passage in a saddle tee for puncturing an irrigation line on which the saddle tee is secured, the tap having a stem having a passage therethrough, the stem having a shoulder to match the contour of the wall near the puncture.

In regard to claim 62, King '723 discloses a tap for insertion through a passage in a saddle tee for puncturing an irrigation line on which the saddle tee is secured, the tap having a

Art Unit: 3679

stem having a passage therethrough, the stem terminating in a cutting member having a sharp edge.

In regard to claim 69, King '723 discloses a saddle tee for use in making a fluid connection with an irrigation line in an irrigation system, the saddle tee comprising;

a base having first and second ends, and a passageway there between, and

a clamp on the second end for engaging the irrigation line generally in alignment with the passageway through the base, the clamp comprising first and second spacers 30 extending from the base, a first jaw 28, having first and second ends, hingedly connected to the first arm intermediate the first and second ends; a second jaw, having first and second ends, hingedly connected to the second arm intermediate the first and second end, and wherein the second ends of the first and second jaws overlap and engage each other to close the clamp, the spacers spacing the jaws sufficiently from the second end of the base to permit debris to pass through the passage when an irrigation line is engaged in the clamp.

In regard to claim 72, King '723 discloses a saddle tee and tap combination for making a fluid connection with an irrigation line in an irrigation system, the saddle tee comprising a base having a passage therethrough, and a clamp thereon for engaging an irrigation line. the clamp holding the irrigation line in alignment with the passage, and compressing the irrigation line into a generally oval cross-section elongated in the direction of the axis of the passageway (see fig. 4);

the tap having a tip 60 with an end adapted to be inserted into the passageway so that the end penetrates the wall of the irrigation line engaged in the clamp, in the direction of the elongation of the cross section.

Art Unit: 3679

In regard to claim 73, wherein the tap having a flange 82 that engages the wall of the irrigation line surrounding the puncture made by the tip.

In regard to claim 74, further comprising a seal 69” adjacent the flange adapted to be compressed between the flange and the irrigation line to form a seal there between.

In regard to claim 75, the fluid connection comprising a saddle tee having a base with a passage therethrough, and a clamp thereon for engaging an irrigation line,

the clamp holding the irrigation line in alignment with the passage,

a tap in the passageway of the saddle tee, the tap having a tip 30 penetrating the irrigation line in the clamp and making a fluid connection with the irrigation line, the tap comprising a shoulder and a seal member adjacent the shoulder compressed by the shoulder to seal with the irrigation line.

In regard to claim 76, wherein the shoulder is formed by a flange 82 on the tip of the tap.

In regard to claim 77, wherein the shoulder is formed at the junction between the tip with the tap.

In regard to claim 78, King ‘723 discloses a saddle tap for making a fluid connection with an irrigation line in an irrigation system, the saddle tap comprising a base, a clamp thereon for engaging the irrigation line, a tip adapted to penetrate the wall of the irrigation line in the clamp and having a passage from the tip and through the base, the clamp holding the irrigation line in alignment with the passage.

In regard to claim 79, the tip comprising a material less rigid than the material of the irrigation line.

Art Unit: 3679

6. Claims 31, 34-35, 40 and 43-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Lord.

In regard to claim 31, Lord discloses a tap ("for use with a saddle tee, the tee to be secured on an irrigation line to make a fluid connection with the irrigation line" is intended use and carries little weight if the prior art is capable of the intended use), the tee including an internal thread, the tap comprising:

a body including an external thread thereon to engage the internal thread on the saddle tee, and

a tip B projecting from the body to penetrate the irrigation line and including a thread thereon to engage the wall of the irrigation line and an opening to allow fluid communication with the exterior of the irrigation line.

In regard to claim 34, further comprising a seal C adjacent the body and to be compressed by the wall of the irrigation line and the body.

In regard to claim 35, further comprising the opening (a) being located near the distal end of the tip.

In regard to claim 40, the tee ("to be secured on an irrigation line to make a fluid connection with the irrigation line" is intended use), the tee including an internal thread, the tap comprising:

a body A including an external thread thereon to engage the internal thread on the saddle tee, and



Art Unit: 3679

a tip B projecting from the body to penetrate the irrigation line and including a thread thereon to engage the wall of the irrigation line and an opening to allow fluid communication with the exterior of the irrigation line.

In regard to claim 43, further comprising a seal C adjacent the body and to be compressed by the wall of the irrigation line and the body.

In regard to claim 44, further comprising the opening (a) being located near the distal end of the tip.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over King, '723. King discloses a clamp as described above, but does not specifically disclose the clamping force of the clamping arms is around 30 pounds. However, King, '723 does disclose supplying the arms with different connecting surfaces 34 so that varying clamping forces can be put on the hose being connected and it would be necessary for the user of the clamp to pick a force that was strong enough to hold the hose firmly between the clamping arms but not strong enough to cause the hose wall to collapse. Therefore it would have been obvious to one of ordinary skill in the art to experiment with different clamping forces until a suitable clamping force was found for the hose to be clamped, such as the 30 pounds recited by the Applicant.

Art Unit: 3679

9. Claims 8-9, 13-14, 16-18 and 70-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over King, '723. King discloses a clamp and tap as described above, but is silent as to the exact dimension recited by the Applicant. However, it would have been obvious to make the clamp these dimensions because a change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955).

10. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over King '723. King discloses a clamp and tap as described above, but is silent as to the exact dimension recited by the Applicant. However, it would have been obvious to make the clamp these dimensions because a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

11. Claims 32-33 and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lord. Lord discloses threads as described above, but not ones that change pitch. However, it would have been obvious to one of ordinary skill in the art to change the pitch of the threads because a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

12. Claims 40, 45-48 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over King '723 in view of Lord.

In regard to claim 40, King, '723 discloses a clamp and tee as described above, where the tap is meant to penetrate the wall of an adjacent hose, but King '723 does not disclose the use of threads on the tap. Lord teaches using a thread to facilitate the piercing of the hose wall. Therefore it would have been obvious to a person having ordinary skill in the art to modify the

Art Unit: 3679

tap of King to include threads, as taught by Lord, in order to improve upon the piercing properties of the tap.

In regard to claim 45, the tap further comprising a shoulder between the tip threads and the external threads, the shoulder having a diameter which increases with distance from the tip threads.

In regard to claim 46, wherein a wall of the irrigation line to assume a contour when the fluid connection is made, the shoulder further comprising a contour to substantially match the contour of the irrigation line wall.

In regard to claim 47, further comprising the increasing in diameter being monotonic.

In regard to claim 48, further comprising the shoulder defining an arc.

In regard to claim 49, Lord discloses the thread circling more than two times, however, it would have been obvious to make the thread circle less than two times because a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

In regard to claim 50, the tee to be secured on the irrigation line by at least one clamp.

### *Conclusion*

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. King '036, King, Jr. et al. '033, King, Jr. et al. 865, King '241, King '972, Ruche et al. 770, King, Sr. '844 Lesquir et al., and Mish all disclose similar couplings common in the art.

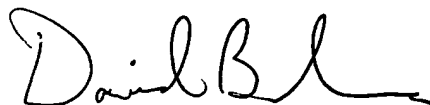
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Bochna whose telephone number is (571) 272-7078.

The examiner can normally be reached on 8-5:30 Monday-Thursday and every other Friday.

Art Unit: 3679

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "David E. Bochna", with a stylized flourish at the end.

David E. Bochna  
Primary Examiner  
Art Unit 3679